

4. QUANTITATIVE ANALYSIS

4.1. Calibration and Model Fit

TABLE 4. Calibration of the Model

Panel A: Fixed Parameters			Panel B: Calibrated Parameters		
Param.	Description	Value	Param.	Description	Value
γ	Risk aversion	2.00	β	Discount rate	0.95
z	Coupon payments	0.03	$\bar{\chi}_0$	Default cost—level	−0.242
λ	Debt maturity	0.05	$\bar{\chi}_1$	Default cost—curvature	0.325
r	Risk-free interest rate	0.01	$\bar{\chi}_2$	Default cost—differential	−0.006
T_{jj}	Persistence j-type	0.969	B	Inflation-indexed debt service	0.02
ρ_y	Endowment, autocorrelation	0.93	α	Probability threshold	−0.028
σ_y	Endowment, shock volatility	0.02			
θ	Reentry probability	0.0385			
σ	Precision of signal	0.011			

TABLE 5. Targeted Moments

Target	Description	Data	Model
$\mathbb{E}[D/Y]$	Average debt	72%	72%
$\mathbb{E}[SP]$	Average bond spreads	624bp	630bp
$\sigma(SP)$	Volatility spreads	288bp	253bp
$\mathbb{P}[DF]$	Default frequency	3.3%	3.4%
IIB_s/TD_s	Inflation-indexed debt relative service	27%	26%
$\eta_{BE,SP}$	Semi-elasticity BE to spreads	−10.44	−10.34

TABLE 6. Untargeted Moments: Business-cycle Statistics

Target	Description	Data	Model
$\sigma(\log C)/\sigma(\log Y)$	Relative volatility consumption	1.13	1.3
$\sigma(TB/Y)/\sigma(\log Y)$	Relative volatility trade balance	0.32	0.44
$\text{corr}(\log C, \log Y)$	Correlation consumption & endowment	95%	96%
$\text{corr}(TB/Y, \log Y)$	Correlation trade balance & endowment	-31%	-50%
$\text{corr}(SP, \log Y)$	Correlation spreads & endowment	-42%	-70%

TABLE 7. Untargeted Moments: Misreport, BE, and Spreads

Target	Description	Data	Model
<i>Panel A: Quarterly Frequency</i>			
$\mathbb{E}[\tilde{\pi}]$	Average inflation misreport	-3.47%	-1.82%
$\sigma(\tilde{\pi})$	Volatility inflation misreport	2.31%	0.89%
$\text{corr}(\tilde{\pi}, \log Y)$	Correlation misreport & output	-58%	-31%
<i>Panel B: High Frequency</i>			
$\sigma(\Delta BE)$	Volatility break-even inflation	0.29%	0.15%
$\text{corr}(\epsilon_{\tilde{\pi}}, \Delta BE)$	Correlation misreport & break-even inflation	32%	40%
$\text{corr}(\epsilon_{\tilde{\pi}}, \Delta \ln SP)$	Correlation misreport & spread	-37%	-39%

4.2. Links between Reputation and Fundamentals

FIGURE 6. Fundamentals and Reputation

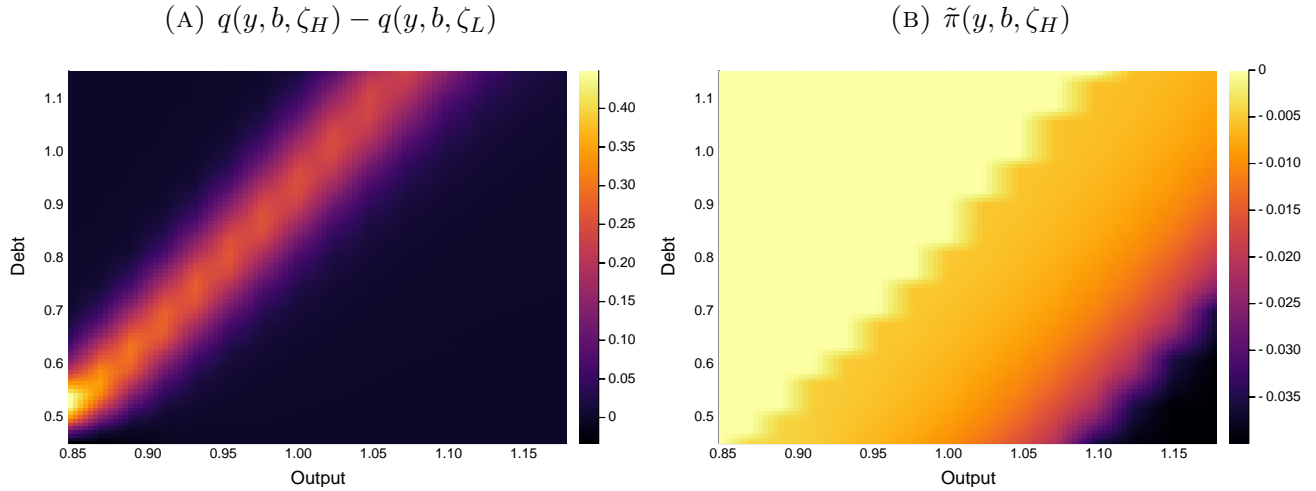
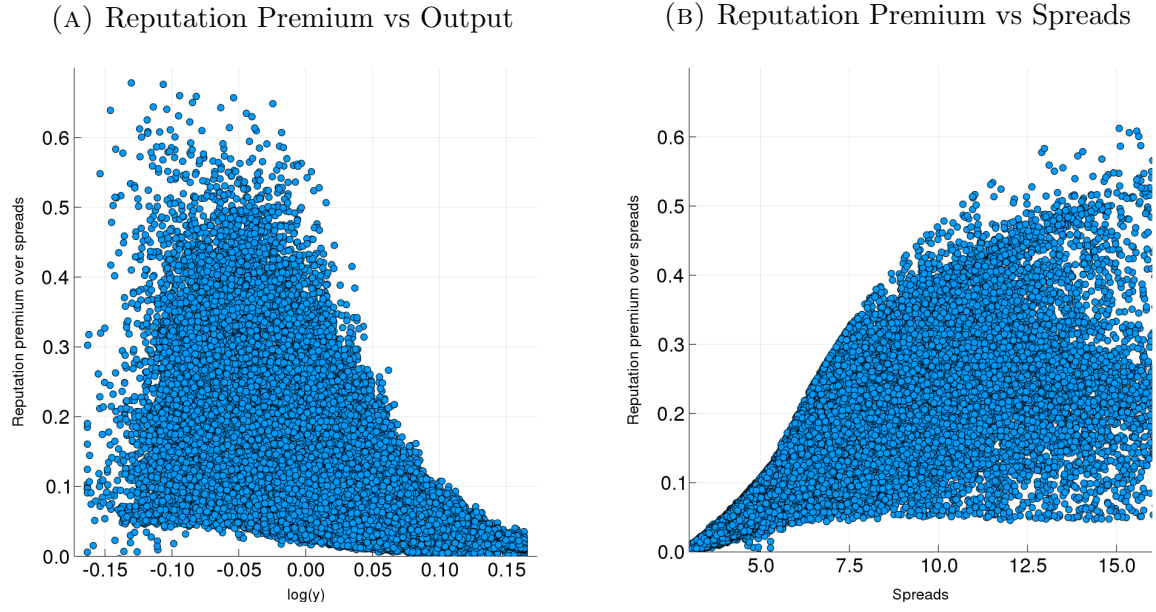


TABLE 8. Decomposition of Spreads: The Reputation Premium

Moment	Description	Value
$\mathbb{E}[\Upsilon]$	Average reputation premium	98bp
$\mathbb{E}[\Upsilon/SP]$	Incidence reputation premium on spreads	13%
$\sigma(\Upsilon)/\sigma(SP)$	Reputation premium volatility	44%
$\sigma(SP \zeta_H)/\sigma(SP)$	Spread volatility under high reputation	60%
$\mathbb{E}[\Upsilon/SP Y < Y_l]$	Incidence with low output	21%
$\text{corr}(\Upsilon, \log Y)$	Correlation reputation premium & output	-64%
$\text{corr}(\Upsilon/SP, \log Y)$	Correlation reputation incidence & output	-67%

FIGURE 7. Reputation Premium and Fundamentals



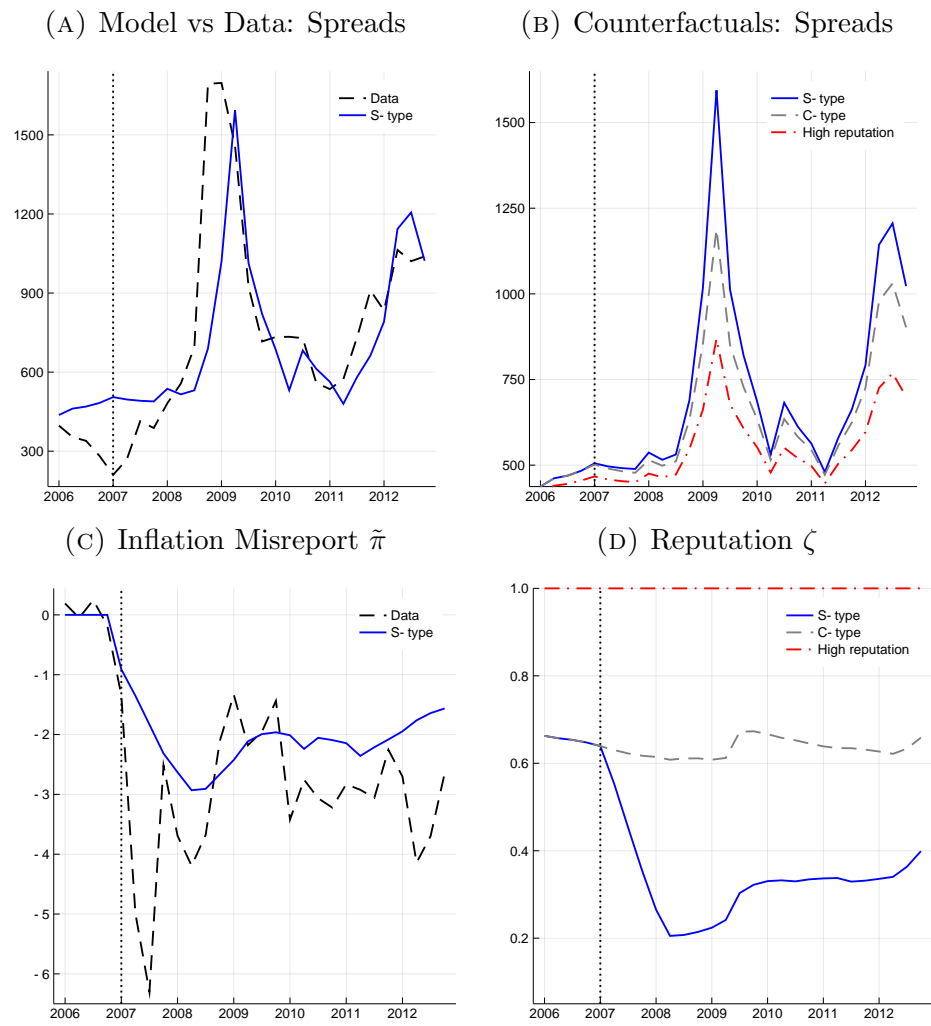
4.3. *The Costs of Information Frictions*

TABLE 9. The Costs of Information Frictions

	Debt and Spreads			Reputation Premium	
	$\mathbb{E}[D/Y]$	$\mathbb{E}[SP]$	$\sigma(SP)$	$\mathbb{E}[\Upsilon]$	$\sigma[\Upsilon]$
Baseline Model	73%	653bp	267bp	92bp	93bp
Fixed C -type	83%	497bp	202bp	-	-
Perfect Information	76%	593bp	235bp	-	-

4.4. *The Argentine Case*

FIGURE 8. Model Simulations: Comparison with Data and Counterfactuals



APPENDIX C. QUANTITATIVE ANALYSIS

C.1. Default Policies and Bond Prices

FIGURE C.1. Default - Repayment Sets

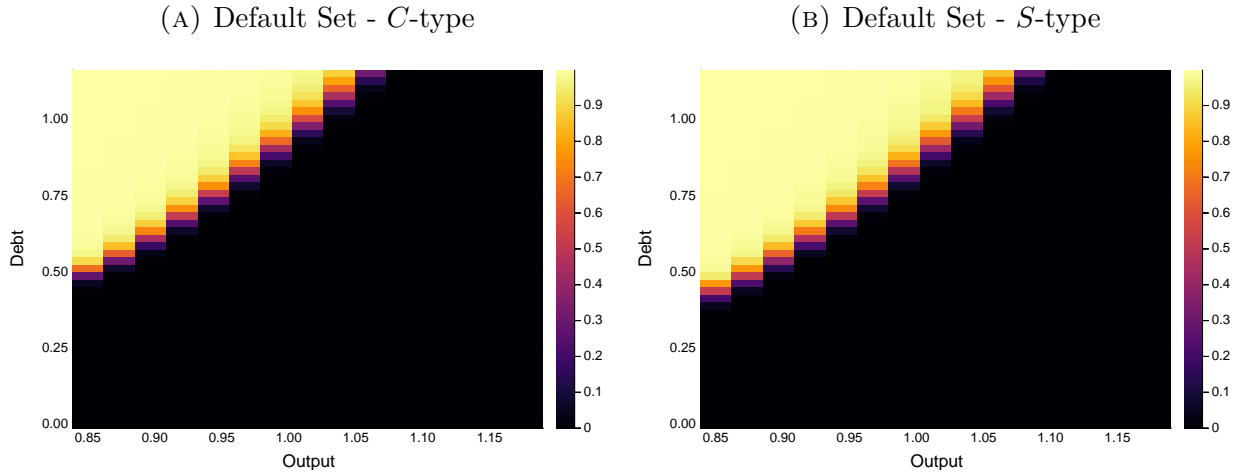
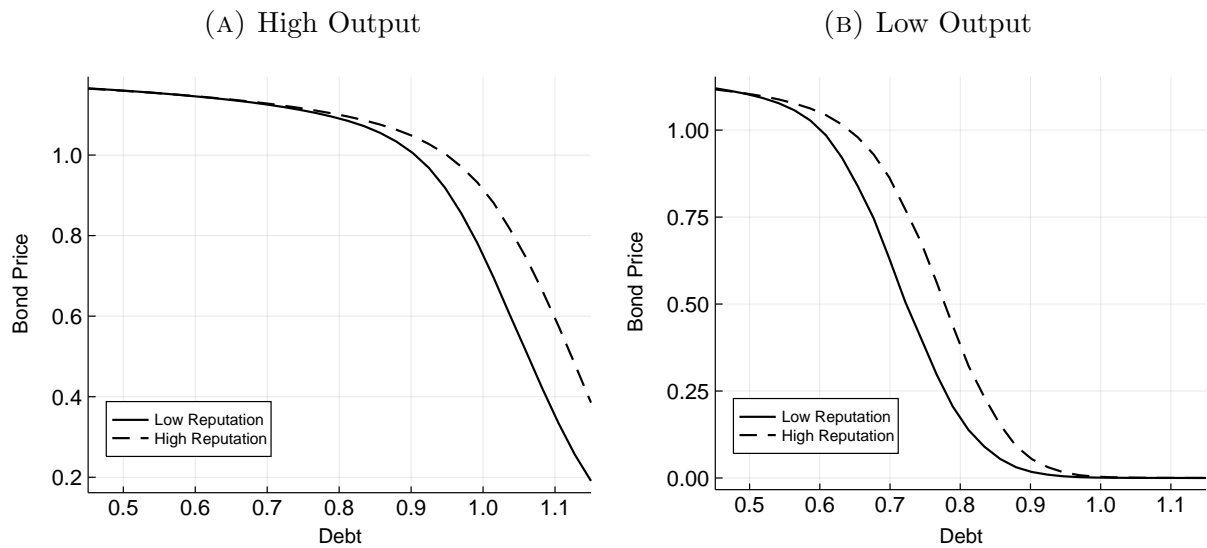


FIGURE C.2. Bond-pricing Kernel



C.2. Analysis of the Learning Parameter α

FIGURE C.3. The Frequency and Surprise Channels

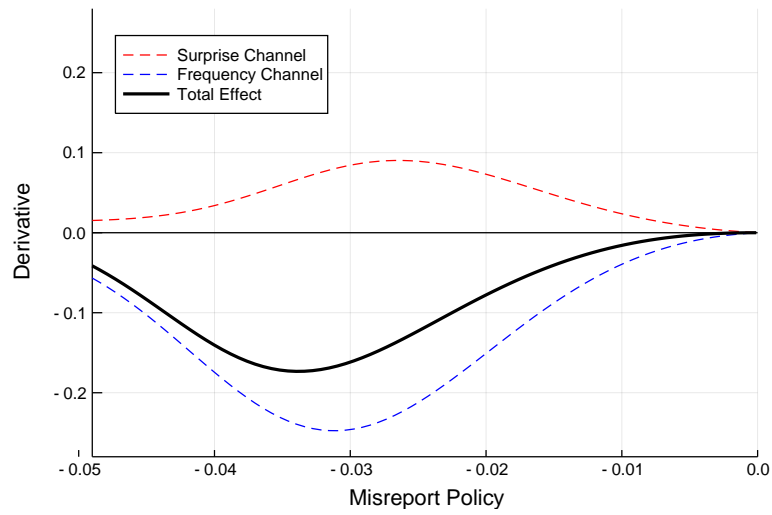
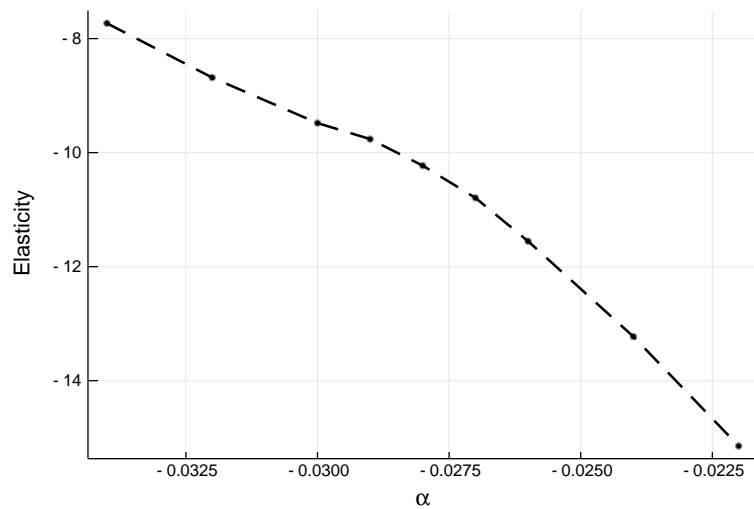


FIGURE C.4. The Relation between α and $\eta_{BE,SP}$



C.3. *The Persistence of Government Types*

TABLE C.1. Reputation Premium and Persistence of Government Types

Moment	Description	Persistence		
		Low	Baseline	High
$\mathbb{E}[\Upsilon]$	Average reputation premium	64bp	98bp	101bp
$\mathbb{E}[\Upsilon/SP]$	Incidence reputation premium on spreads	8%	13%	14%
$\sigma(\Upsilon)/\sigma(SP)$	Reputation premium volatility	35%	44%	43%
$\sigma(SP \zeta_H)/\sigma(SP)$	Spread volatility under high reputation	68%	60%	61%
$\mathbb{E}[\Upsilon/SP Y < Y_l]$	Incidence with low output	16%	21%	22%
$\text{corr}(\Upsilon, \log Y)$	Correlation reputation premium & output	-62%	-64%	-62%
$\text{corr}(\Upsilon/SP, \log Y)$	Correlation reputation incidence & output	-67%	-67%	-64%

C.4. *Comparison with the Perfect-information Case*

FIGURE C.5. Ratio of Spreads: Baseline Model versus Perfect-information Case

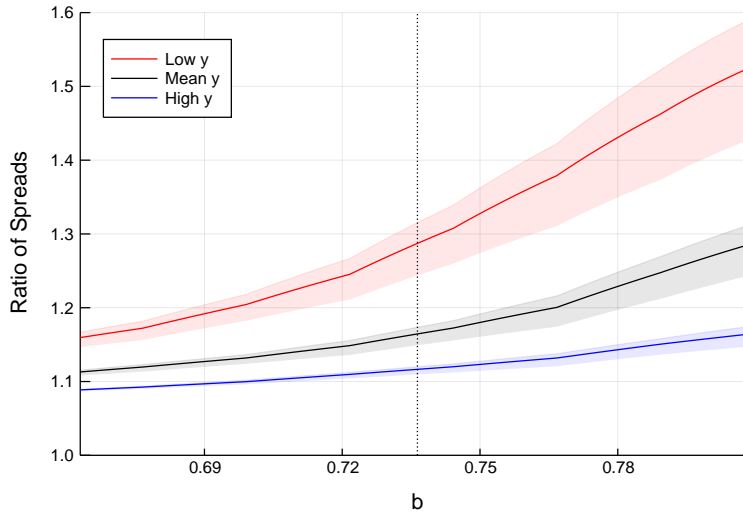


FIGURE C.6. CEC - Baseline Model vs. Perfect-information Case

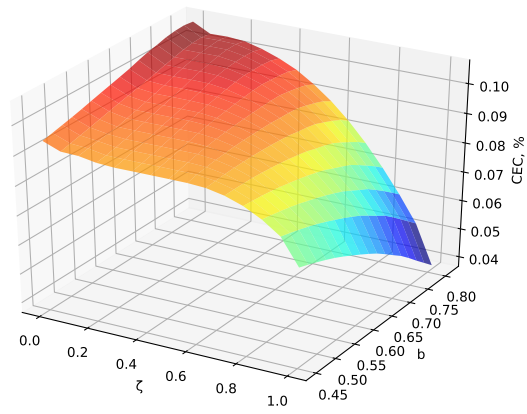
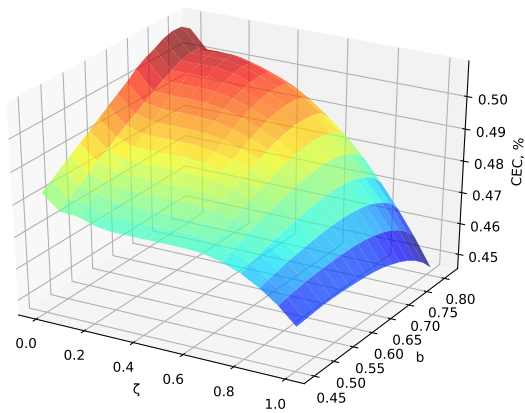
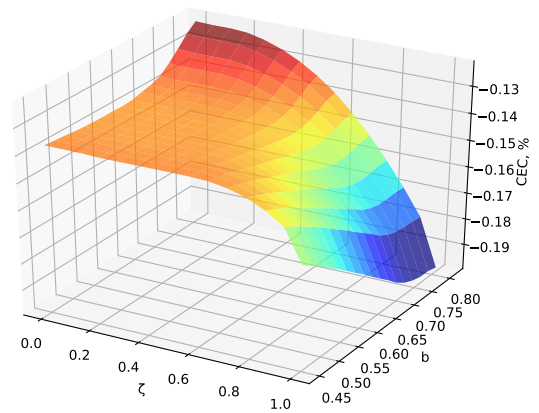


FIGURE C.7. CEC - Baseline Model vs. Fixed-types Case

(A) *C*-type(B) *S*-type

C.5. *The Argentine Case: Additional Material*

FIGURE C.8. Model Simulations

